KEYS TO THE GENERA OF INSECTIVORA, CHIROPTERA AND RODENTIA OF EAST AFRICA

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It is the purpose of these keys to help newcomers to the field to become more rapidly acquainted with the small mammals of East Africa; a task which is usually found difficult due to the lack of comprehensive literature dealing with identification. The keys extend only to generic level since a taxonomic revision is needed in most groups. Having determined the genus more specialised works, of which the following will be found most useful, can be referred to for the species: for all orders; Allen (1) Ansell (2) Ellerman (9) Hollister (11) Moreau (12) Swynnerton & Hayman (14 and 15), for Chiroptera; Harrison (10), and for Petrodomus (elephant shrews), Corbet (6). References to original descriptions and old revisions may be found in the above.

Walker (16) has been used as the authority for some of the more problematical genera, while Romer (13) has been used at the higher taxonomic level (e.g. for the affinities of Anomalurus and Pedetes).

To use the keys it is generally necessary to have both the skin and skull for Chiroptera, and although the Insectivora and Rodentia can be keyed on the skull alone, skin characters are included. None of the keys can be used for the skin alone.

This work has been carried out at the National Museum using mainly the National Museum collection of small mammals.

Key to the Insectivores. 13 genera

Zygomatic arch present, (golden moles, hedgehogs, and elephant shrews)..... 1
Zygomatic arch absent, (shrews and otter shrews)..... 6

1. Cheek teeth zalambdodont (cusps V-shaped); body mole-like, with a smooth leathery pad on the nose, and very large claws on the front feet; rudimentary eyes covered with skin; no externally visible ears or tail, (family Chrysochloridae)..... Amblysomus (= Chlorotalpa)

Cheek teeth dilambdodont (cusps W-shaped; body not mole-like 2

2. Palate extends well beyond the tooth row; body heavily armed with spines; nose not long and mobile, (family Erinaceidae) ..... Erinaceus
Palate does not extend beyond the tooth row; body not armed with spines; nose long and mobile, projecting far beyond the nasal bones, (family Macroscelididae) 3

3. *Seven or eight teeth in the upper jaw; no large palatal foramina; skull more than 57 mm long. Pelage coarse, black and red or checkered ..... Rhynchocyon
Ten teeth in the upper jaw; large palatal foramina present; skull less than 57 mm long. Pelage soft, light grey-brown 4

4. A pair of large palatal foramina lie between the molariform teeth. Ears shorter than 30 mm; five toes on the hind foot 5
No large palatal foramina between the molariform teeth. Ears longer than 30 mm; four toes on the hind foot ..... Petrodomus

5. Ten teeth in the lower jaw. Chest gland present on the skin ..... Elephantulus
Eleven teeth in the lower jaw. Chest gland present (N. fuscipes) or absent (N. brachyrhynchus) Nasilio

6. Ten upper and ten lower teeth (zalambdodont or dilambdodont). Nose not long and mobile; body adapted for swimming, with a long and, at least to some extent, laterally compressed tail, (family Potamogalidae) 7
Not more than nine upper and seven lower teeth (dilambdodont). Nose long and mobile, projecting far beyond the nasal bones; body not adapted for swimming, (family Soricidae)..... 8

7. Teeth zalambdodont. Tail much compressed laterally; nose with a horny or leathery rhinarium; hind feet not webbed ..... Potamogale
Teeth dilambdodont. Tail slightly compressed laterally; nose with a fleshy rhinarium; hind feet webbed ..... Micropotamogale

8. Nine teeth in the upper jaw (four upper unicuspids)..... 9
Eight teeth in the upper jaw (three upper unicuspids) 11

9. Seven teeth in the lower jaw; braincase strongly angled in the squamosal region. No bristle hairs on the tail ..... Myosorex
Six teeth in the lower jaw; braincase not strongly angled laterally. With or without bristle hairs on the tail 10

* In very old individuals the crowns of two rooted teeth may be so worn as to be completely divided, thus appearing as two separate teeth.

10. Condylo - basal length of the skull well over 20 mm. Length of the head and body 120 to 150 mm; possesses a remarkably strong, thick, vertebral column; no bristle hairs on the tail ..... Scutisorex
Condylo - basal length less than 20 mm. Head and body length well under 100 mm; vertebrae not specialized as above; tail with bristle hairs, or (formerly genus Sylvisorex)without bristle hairs on the tail..... Suncus

11. Six or seven teeth in the lower jaw; braincase strongly angled laterally in the squamosal region. Body rather mole-like; with long claws, particularly on the front feet; ear not visible above the fur; tail short, about twice the length of the hind foot, without bristle hairs ..... Surdisorex
Six teeth in the lower jaw; braincase not strongly angled laterally. Habit shrew-like; tail more than three times the length of the hind foot, with bristle hairs ..... Crocidura

Key to the Chiroptera 29 genera

Special attention should be paid to counting teeth in bats; some teeth are minute and must be looked for with great care. External features readily characterize the families of bats, and these are illustrated in Fig. 1.

Crowns of the molars smooth, with a longitudinal groove. The first and second fingers with a claw; eyes large, (suborder Megachiroptera, family Pteropodidae).....1
Crowns of the molars not smooth. Only the first finger with a claw; eyes small or minute, (suborder Microchiroptera).....6

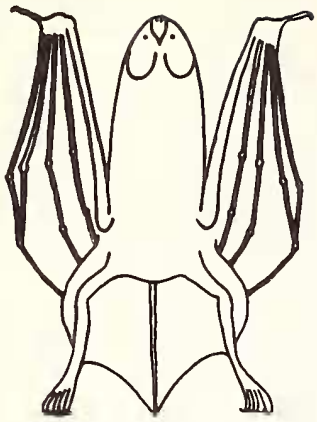
1. *Cheek teeth 3/5. White tufts of fur by the ears 2
Cheek teeth 5/6. No white tufts of fur by the ears..... 4

2. Rostrum large, laterally compressed and rectangular in profile. Lips with a large flap ..... Hypsignathus
Not as above 3

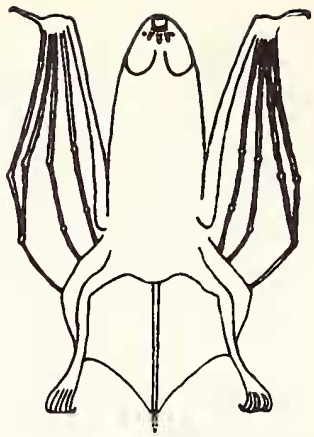
3. Orbit to the tip of the nasals more than the lacrymal breadth ..... Epomophorus
Orbit to the tip of the nasals less than the lacrymal breadth ..... Micropteropus

4. First upper cheek tooth minute. Head and shoulders paler than the body ..... Pteropus
Not as above 5

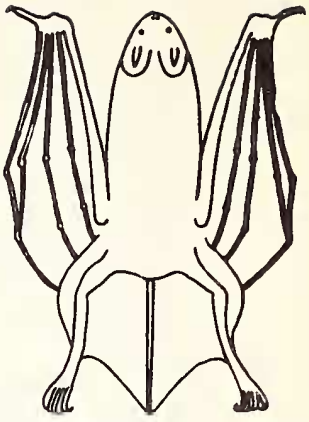
* (i.e. 3 upper and 5 lower cheek teeth)



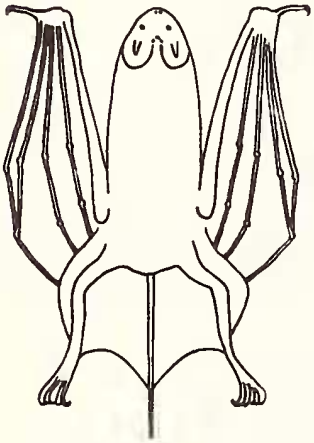
RHINOLOPHIDAE
HORSESHOE BATS



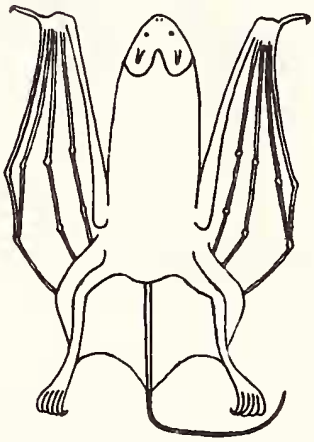
HIPPOSIDERIDAE
LEAF NOSED & TRIDENT BATS



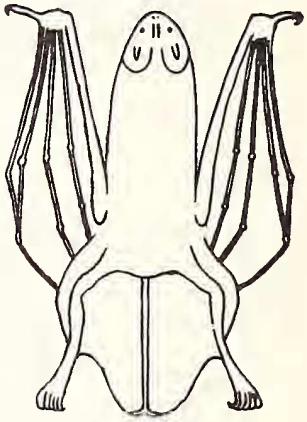
VESPERTILIONIDAE
SIMPLE NOSED BATS



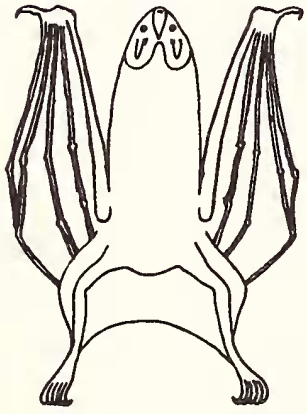
MOLOSSIDAE
FREE TAILED BATS



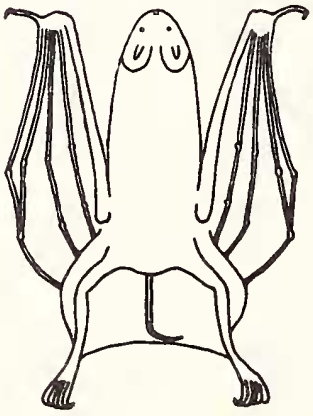
RHINOPOMIDAE
MOUSE TAILED BATS



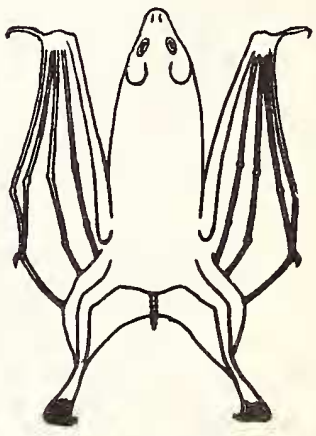
NYCTERIDAE
HOLLOW FACED BATS



MEGADERMIDAE
YELLOW WINGED & FALSE VAMPIRE BATS



EMBALLONURIDAE
SHEATH TAILED BATS



PTEROPODIDAE
FRUIT BATS & FLYING FOXES

Fig. 1

5. Bulla with an auditory meatus. Body and femur covered with yellowish fur ..... Eidolon
Bulla without an auditory meatus. No yellowish fur..... Rousettus

6. Two inflated bulbs on top of the rostrum. Free tail, about as long as the head and body, (family Rhinopomatidae)..... Rhinopoma
No bulbs on top of the rostrum. Tail shorter than the head and body 7

7. Tail perforates the upper surface of the interfemoral membrane, (family Emballonuridae)..... 8
Tail does not perforate the interfemoral membrane 9

8. Three lower incisors; frontals concave. Forearm 45 to 55 mm long ..... Coleura
Two lower incisors; frontals not conspicuously concave. Forearm 50 to 83 mm long ..... Taphozous

9. Dish face depression on the rostrum. Tail ends in a T-shaped tip, (family Nycteridae) ..... Nycteris
Tail does not end in a T-shaped tip 10

10. Dental formula 0/2, 1/1, 1/2, 3/3. Tailless; tragus divided, (family Megadermidae) 11
Bats with tails; tragus, if present, not divided 12

11. Palate extends anteriorly slightly beyond the nasals. Overall colour grey; nose leaf does not extend half way to the base of the ears ..... Megaderma (= Cardioderma)
Palate extends anteriorly well beyond the nasals. Wings yellowish in life; nose leaf extends more than half way to the base of the ears ..... Lavia

12. No tragus present 13
Tragus present, may be small 17

13. Dental formula 1/2, 1/1, 2/3, 3/3. Leaf nosed; Two joints in the first toe, three in the others, (family Rhinolophidae) ..... Rhinolophus
Dental formula 1/2, 1/1, 1-2/2, 3/3; zygoma large. Leaf nosed; two joints on all the toes, (family Hipposideridae)..... 14

14. Cheek teeth 5/5. Nasal structure may or may not have three pointed flaps above 15
Cheek teeth 4/5. Nasal structure horseshoe-shaped with three pointed flaps above 16

15. Nasal structure squarish ..... Hipposideros
Nasal structure horseshoe shaped with three pointed flaps above; ear notched ..... Triaenops

16. Ears very short, hardly projecting above the fur ..... Cloeotis
Ears large, naked..... Asellia

17. Braincase thick, flat, broad. Tail projects beyond the edge of the interfemoral membrane; fur short, velvet-like, (family Molossidae)..... 18
Braincase generally delicate, round. Tail extends only to the edge of the interfemoral membrane; hair often long, silky, (family Vespertilionidae)..... 20

18. Skull height 1/3 of the width ..... Platymops
Skull height at least 1/2 of the width 19

19. Flange on the zygomatic arch large. A pale greyish area on the upper back ..... Otomops
Flange on the zygomatic arch indistinct. Generally uniform colour, sometimes spotted with white ..... Tadarida

(= Nyctinomus, and including subgenera Chaerophon and Mops)

20. Two upper incisors. Ear more than 15 mm long ..... Laephotis
Ear less than 15 mm long 21

21. Cheek teeth 6/6 22
Cheek teeth less than 6/6 23

22. First two upper cheek teeth small. Fur long and woolly; ear rather large, pointed and funnel-shaped; margin of the interfemoral membrane fringed with hair ..... Kerivoula
Second upper cheek tooth minute. Fur not long and wooly; tragus erect and tapering ..... Myotis

23. Cheek teeth 5/6, the first upper being minute. In the longest finger (3rd.) the second bone from the"wrist" is about 1/3 the length of the third bone; tail long, about the length of the head and body ..... Miniopterus
Cheek teeth less than 5/6. In the 3rd. finger the second bone from the "wrist" is well over 1/3 the length of the third bone 24

24. Cheek teeth 5/5. Generally very small species..... Pipistrellus
Cheek teeth 4/5 25

25. Condylo-basal length of skull less than 16 mm..... 26
Condylo-basal length more than.16 mm. Usually lemon-yellow or cream coloured fur below ..... Scotophilus

26. One upper incisor ..... Nycticeius
Two upper incisors 27

27. Braincase very deep. A fleshy lobe at the base of the mouth connected by a ridge to the base of the ear ..... Glauconycteris
Not as above..... Eptesicus

ERRATUM to J.E. Afr. Nat. Hist. Soc., Vol.XXV, No3 (112) Jan 1966, p.194.

Key to Genera of Chiroptera: No. 20 should read:

20.	Two upper incisors, cheek teeth less than 6/6. Ear more than 15mm long	Laephotis
	Ear less than 15mm long, or else one upper incisor or cheek teeth 6/6	21.

The key is based on skull characters. Skin characters given for each genus are seldom key characters and are intended to be used mainly as a measure of confirmation of an identification already arrived at by using the skull. The skin characters are short and sometimes, perhaps, a little vague; this is due to the necessity for brevity and to include the genus in all its forms through out East Africa.

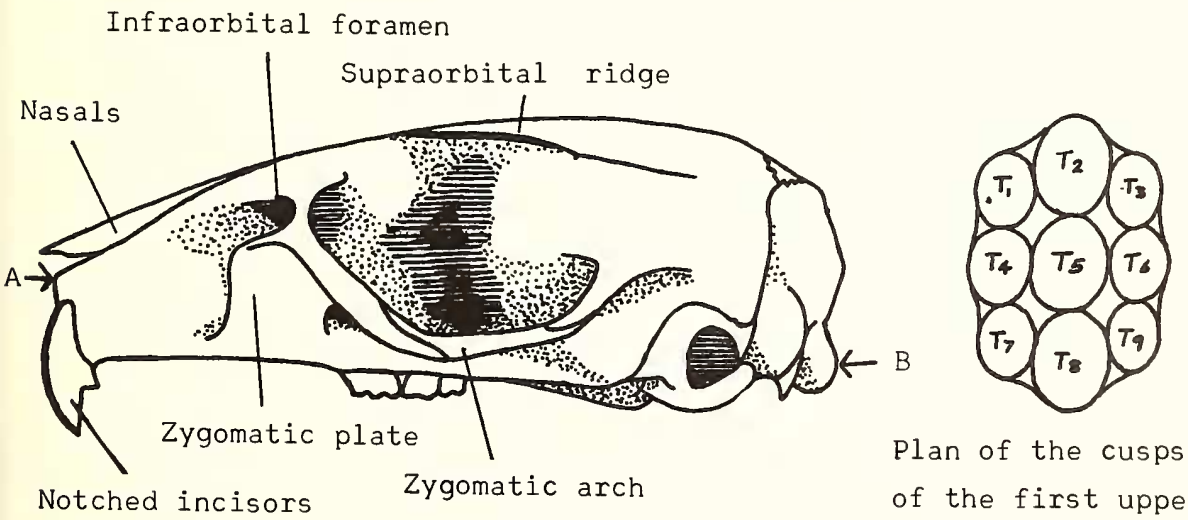
Unless it is specifically stated, the lower jaw is not used in the key, and the fur colours given are the general overall colours of the back and sides. For the sake of simplicity, M is loosely used for all molariform teeth.

The animals are divided into size groups as follows:- "Very large" - any size greater than Rattus rattus; "Large" - size about that of Rattus rattus; "Medium" - size about that of Rattus (Mastomys) coucha; "Small" - the size of Mus musculus or smaller.

In the case of the Muridae a well haired tail means well haired for a Murid, and would be very poorly haired when compared with, for instance, a squirrel or a dormouse (Graphiurus). A common example of a well haired tail is that of Arvicanthis, and a poorly haired tail that of Rattus rattus. A pencilled tail is one which becomes very narrow and well haired towards the tip, a common example is Grammomys.

It has been found inconvenient to key the Murids according to their subfamilies, of which there are three:- Dendromyinae, Murinae and Otomyinae. There is, furthermore, some disagreement as to the classification of some genera. Delanymys, Dendromus, Deomys, and Steatomys, with the possible inclusion of Beamys and Saccostomus, are Dendromyinae, Otomys belongs to the Otomyinae, and the rest are all Murinae.

In the case of the genus Rattus a departure has been made from the general plan, so that the five subgenera, all of which have formerly held full generic status, have been keyed out separately.



AB = Condylo-basal length

Plan of the cusps of the first upper left molar (M_1) of a Murid

Fig. 2

Infraorbital foramen small, rarely as large as the surface of the largest molar, or else absent, (suborder Sciuromorpha : some mole-rats and all squirrels 1
Infraorbital foramen present, larger in one dimension than the surface of the largest molar 8

1. Angular portion of the lower jaw turned outwards; incisors white. Fossorial; tail short, (superfamily Bathyergoidea, family Bathyergidae)..... 2
No outward turn to the lower jaw; incisors yellow; generally arboreal; tail long and bushy, (superfamily Sciuroidea, family Sciuridae)..... 4

2. Cheek teeth 3/3 or 2/2. Size medium; body naked...Heterocephalus
Cheek teeth more than 3/3. Size large; body furred 3

3. Cheek teeth always 4/4; palate extends well beyond the tooth row, as far as, or beyond, the roots of the upper incisors. Fur grey-brown, and usually with a white patch on top of the head..... Cryptomys
Cheek teeth 6/6, though usually no more than 5/4 present at one time, often 4/4; palate does not extend far beyond the tooth row, never reaching the roots of the upper incisors. Fur light grey-brown with no white patch on head..... Heliophobius

4. Palate extends well beyond the tooth row. Size large to very large; fur bristly ..... Xerus (including subgenus Euxerus)
Palate does not extend conspicuously beyond the tooth row. Fur soft 5

5. Infraorbital foramen egg-shaped, about the size of the surface of the largest cheek tooth. Cheek teeth 4/4. Size very large; ventral surface poorly furred, sharply divided from the well furred sides and back ..... Protoxerus
Infraorbital foramen smaller than the surface of the largest cheek tooth. Ventral surface with less fur than the sides, but there is no sharp division 6

6. Cheek teeth 4/4. Size very large, (including subgenus Aethosciurus)..... Heliosciurus
Cheek teeth 5/4. Size medium to large 7

7. Both upper and lower Cheek teeth flat crowned in the adult. Four mammae, small round ears..... Funisciurus
Lower cheek teeth tend to remain cuspidate in the adult. Six mammae, ears not unusually small ..... Paraxerus (including subgenus Tamiscus)

8. Infraorbital foramen generally V-shaped, (suborder Myomorpha: most rats and mice).....13

Infraorbital foramen large, oval or round, usually larger than the foramen magnum; four cheek teeth. Size always very large, (suborder Hystricomorpha)..... 9

9. Volant or saltatorial. Fur soft, (superfamily Anomaluroidea)..... 10
Cursorial. Fur bristly or spiny, (superfamily Hystricoidea)..... 11

10. Infraorbital foramen slightly smaller than the foramen magnum. Volant adaptations, with a membrane between the limbs; sharp scales present at the base of the tail, (family Anomaluridae)..... Anomalurus
Infraorbital foramen larger than the foramen magnum. Saltatorial, with long hind legs and tail; no scales at the base of the tail, (family Peditidae)..... Pedetes

11. Upper incisors with 3 grooves. Fur bristly, (family Thryonomidae)..... Thryonomys (= Choeromys)
Upper incisors not grooved. Pelage spiny, with long, hollow quills, (family Hystricidae)..... 12

12. Top of the skull flat. Tail about as long as the head and body ..... Atherurus
Top of the skull very convex. Tail short ..... Hystrix

13. Temporal muscles cover the cranium, and are divided by a sagital crest in mature individuals; cheek teeth 3/3; incisors yellow. Size large; fossorial adaptations, lips joined behind the upper incisors; tail short, (family Rhizomyidae)..... Tachyoryctes
Temporal muscles originate only on the sides of the cranium, no sagital crest. Lips not joined behind the upper incisors 14

14. Cheek teeth 4/4. Size small-medium; fur short, soft and dense, light grey or grey-brown in colour; tail thick and bushy, (family Gliridae)... Graphiurus
Cheek teeth 3/3. Tail, except for Lophiomys, relatively sparsely haired, never bushy 15

15. Cheek teeth either laminate, with laminae separated by wide folds, or cuspidate with cusps in 2 rows, (family Cricetidae)..... 16
Cheek teeth, if laminate, with laminae tightly pressed together; usually cuspidate with cusps in 3 rows, (family Muridae)..... 19

16. Temporal fossae roofed over by plates of bone arising from the frontals, parietals, and jugals; upper surface of the skull granulated; incisors ungrooved, white. Size very large; hair long with a black and white erectile crest on the back; tail short and bushy, (subfamily Lophiomyinae)..... Lophiomys

Temporal fossae open; upper surface of the skull not granulated; upper incisors grooved, yellow. Size small to large; fur short and generally golden brown in colour; tail long and well haired or tufted at the tip, (subfamily Cricetinae) 17

17. Zygomatic plate projects less than half way from the posterior edge of the infraorbital foramen to the incisors. Size small, hind foot generally less than 24 mm long, with soles naked, subgenus Dipodillus, or completely haired, subgenus Gerbillus ..... Gerbillus

Zygomatic plate projects about half way from the posterior edge of the infraorbital foramen to the incisors. Size medium to large: hind foot generally more than 24 mm long..... 18

18. Second pair of palatal foramina shorter than the length of M_1. Size large, generally weighing over 75 gms.; hind foot usually more than 35 mm long with the sole entirely naked ..... Tatera

Second pair of palatal foramina longer than the length of M_1. Size medium, generally weighing less than 75 gms.; hind foot usually less than 35 mm long with a narrow band of fine hairs across the sole ..... Taterillus

19. Incisors not grooved 20

Incisors grooved 44

20. Condylo-basal length of the skull more than 50 mm.; palatal foramina shorter than, and not nearly reaching, the tooth row. Size very large; fur short, fine and grey-brown in colour; tail about equal in length to the head and body, fairly well haired, dark in colour for at least 3 or 4 inches from the base, changing abruptly to white distally; possesses cheek pouches ..... Cricetomys

Condylo-basal length of the skull less than 50 mm..... 21

21. Palate ends far behind M_3, the end acute, V-shaped..... 22

Palate does not end far behind M_3, the end rounded or square 23

22. Incisors outstandingly pro-odont. Size medium; fur coarse, brown; tail very much shorter than the head and body and fairly well haired ..... Uranomys

Incisors orthodont. Size small - medium; fur spiny, varying in colour from light red-brown to dark grey, belly white; tail slightly shorter than the head and body, bicoloured ..... Acomys

23. M_1 relatively large, larger than M_2+ M_3; the wearing surfaces of the upper incisors notched. Size small; fur fine, though sometimes "crisp", grey-brown in colour, belly sometimes white; tail shorter than head and body ..... Mus
M_1 not longer than M_2+M_3, the wearing surfaces of the upper incisors seldom notched 24

24. Condylo-basal length of the skull less than 20 mm. Size small; fur soft, brown, with a black patch between the eye and the nostril; tail much longer than the head and body, poorly haired ..... Delanymys
Condylo-basal length more than 20 mm.....25

25. Palatal foramina short, not nearly reaching M_1.....26
Palatal foramina end about level with, or posterior to, M_1 27

26. Rostrum flat in profile; zygomatic arch with a small flange. Size large; fur soft, brown; tail slightly longer than the head and body, poorly haired ..... Malacomys
Rostrum convex in profile; zygomatic arch with no flange. Size medium; fur short, soft, uniform light grey; tail slightly shorter than the head and body, very finely haired, grey at the base, white distally; possesses cheek pouches ..... Beamys

27. Frontals perfectly flat in the young, and generally concave in the adults. Size large; fur soft, brown, with a dark patch extending from the nose backwards to surround the eyes, belly white; tail longer than the head and body, pencilled ..... Thallomys
Frontals at least slightly convex, or convex in parts 28

28. Molars massive, M_3 as long as M_2 29
M_3 shorter than M_2 30

29. Width across both palatal foramina less than the width of M_1; cusps normal. Size large; fur long and soft, brown; tail about equal in length to the head and body, poorly haired..... Dasymys
Width across both palatal foramina greater than the width of M_1; cusps large and of uniform size, with the wearing surfaces strongly directed backwards in the upper jaw; the outer row of cusps of M_3 very conspicuously reduced. Size large, fur long and soft, grey-brown with a deep rufous nose, ears, and rump; belly white; tail longer than the head and body, poorly haired ..... Oenomys

30. Incisors narrow, markedly pro-odont; palate and palatal foramina wide; no supraorbital ridge. Size medium; fur soft, short, grey-brown; tail shorter than the head and body, finely haired ..... Zelotomys
Incisors not pro-odont 31

31. Distance from the anterior edge of the zygomatic plate to the tip of the nasals less than 1½ times the length of the tooth row, measuring along the crowns 32
Distance from the anterior edge of the zygomatic plate to the tip of the nasals more than 1½ times the length of the tooth row, measuring along the crowns 34

32. Width of the rostrum immediately in front of the zygomatic plate equal to, or greater than, the length of the rostrum (measured from the zygomatic plate), and about equal to the length of the tooth row; no black membrane covering the skull. Size medium-large; fur short, coarse, yellowish-brown to light grey, flecked with black; tail shorter than the head and body, well haired, bicoloured ..... Arvicanthis
Width of the rostrum less than its length (from the zygomatic plate); a thin black membrane covers the surface of the skull (this easily removed) 33

33. Zygomatic plate generally sharp pointed anteriorly. Size medium; fur short, coarse; general colour either dark brown with a black dorsal stripe and numerous longitudinal white stripes (L. barbarus) or broken stripes (L. striatus) on the back and sides, or else light orange-brown with a single black dorsal stripe (L. griselda); tail about equal in length to the head and body, well haired, bicoloured ..... Lemniscomys
Zygomatic plate rarely sharp pointed anteriorly. Size medium; fur short, coarse, grey-brown in general colour, with 4 dark longitudinal dorsal stripes; tail shorter than the head and body, well haired, bicoloured ..... Rhabdomys

34. Anterior ventral edge of the foramen enclosed by the zygomatic arch is level with, or posterior to, the anterior edge of M_1; no supraorbital ridge. Size medium to large; fur short, coarse (or "harsh") with the colour varying from dark grey to deep red-brown; tail shorter than the head and body, poorly haired ..... Lophuromys
Anterior ventral edge of the zygomatic foramen lies anterior to M_1 35

35. Anterior edge of the zygomatic plate turned outwards; zygomatic arch greatly flattened and deflected inwards ventrally; antero-internal cusp (T_1) of M_1 and M_2 absent, postero-internal cusp (T_7) present. Size medium - large; fur short, soft, brown; tail very short, well haired; possesses cheek pouches ..... Saccostomus
Zygomatic plate not turned outwards; zygomatic arch not greatly flattened; T_1 present 36

36. T_7 of M_1 and M_2 well developed, so that there are 3 well defined cusps on the inner side of M_1 and M_2. Size medium-large; fur soft, short, grey-brown; tail much longer than the head and body, pencilled ..... Thamnomys
T_7 of M_1 and M_2 absent, or else so much reduced that there are only 2 well defined cusps on the inner side of M_1 and M_2 37

37. Supraorbital ridge absent; in profile the top of the rostrum is in a straight line with the top of the cranium. Size medium - large; fur short, soft, and thick, with numerous guard hairs on the back and belly; deep brown in colour; tail longer than the head and body, poorly haired; hind foot very long, the metatarsals loosely knit together so that the foot can be greatly expanded in width ..... Colomys
Supraorbital ridge present; rostrum curved downwards. Hind foot normal 38

38. Outer borders of the palatal foramina strongly angled outwards. Size medium; fur short, soft, red-brown (redder on the rump) with a dark dorsal stripe; tail slightly shorter than the head and body, poorly haired ..... Hybomys
Outer borders of the palatal foramina straight or smoothly curved. Fur with no dorsal stripe 39

39. Distance from the anterior end of the palatal foramina to the incisors greater than the length of M_1 ; supraorbital ridge prominent. Size large; fur very short, slightly coarse, and with long guard hairs; colour ranging from light brown to dark grey; tail about the same length as the head and body, poorly haired; D_5 of the hind foot extends well beyond the base of D_4. Rattus (Rattus)
Distance from the anterior end of the palatal foramina to the incisors less than the length of M_1 ; or else about equal to the length of M_1, in which case the animal is medium sized, or smaller 40

40. Distance from the palatal foramina to the incisors less than the length of M_1. Size large or medium 41
Distance from the palatal foramina to the incisors about equal to the length of M_1. Size small - medium or medium 42

41. Zygomatic plate small, extends only very slightly anterior to the zygomatic arch; supraorbital ridge not very prominent. Size medium; fur short, soft, from light grey to red-brown in colour; tail longer than the head and body, pencilled; D_5 of the hind foot reaches first joint of D_4 ..... Grammomys
Zygomatic plate extends well in front of the zygomatic arch; supraorbital ridge very prominent. Size large; fur short; soft but not silky, with guard hairs; tail about the

same length as the head and body; D_5 of the hind foot does not reach the base of D_4 ..... R. (Aethomys)

42. Zygomatic plate small; extends only very slightly anterior to the zygomatic arch. Size small-medium; fur soft, brown to grey-brown with, usually, a darker patch surrounding the eye; tail longer than the head and body, finely haired; D_5 of the hind foot extends well beyond the first joint of D_4 ..... R. (Hylomyscus)

Zygomatic plate extends well in front of the zygomatic arch (at least 1 mm). D_5 of the hind foot does not reach the first joint of D_4 43

43. Septum dividing the palatal foramina swollen only in the anterior half, the foramina extend posteriorly to at least the second root of M_1. Size medium; fur short, soft, grey-brown; tail about the same length as the head and body, poorly haired; D_5 of the hind foot reaches, but does not extend beyond, the base of D_4 ..... R. (Mastomys)

Swelling in the septum dividing the palatal foramina extends beyond the anterior half, the foramina do not reach the second root of M_1. Size medium; fur short, soft, grey-brown; tail longer than the head and body, poorly haired; D_5 of the hind foot extends a little beyond the base of D_4..... R. (Praomys)

44. Both upper and lower incisors grooved; molars laminate; in the upper jaw M_3 is the largest cheek tooth. Size large; fur long, soft, deep brown flecked with grey-black; tail much shorter than the head and body, well haired..... Otomys

Only the upper incisors grooved; cheek teeth cuspidate, M_3 being the smallest 45

45. Upper incisors with 2 grooves; no zygomatic plate. Size large; fur short, slightly coarse, red-brown on the back and white on the belly, tail longer than the head and body, pencilled, bicoloured ..... Deomys

Upper incisors with only one groove; at least a small zygomatic plate present 46

46. Antero-internal cusp (T_1) of M_1 and M_2 absent. Size small 47

T_1 of M_2 and M_3 present. Size medium-large or large 48

47. Tooth rows parallel to each other. Fur soft; light brown with a dark dorsal stripe; tail slightly longer than the head and body, finely haired; only 3 functional digits on the front feet ..... Dendromus

Tooth rows diverge anteriorly. Fur short, soft, grey to red-brown in colour with the belly white; tail shorter than the head and body, well, but finely, haired; 4 functional digits on the front foot ..... Steatomys

48. Palatal foramina project beyond the anterior edge of M_1. Size large; fur long and coarse, orange-brown flecked with black; tail slightly longer than the head and body, well haired with hairs up to 4 mm. long, bicoloured..... Mylomys

Palatal foramina do not reach M_1. Size medium-large; fur rather long, coarse, light brown flecked with black, and often with a dark dorsal stripe; tail about the same length as the head and body, well haired, but the hairs less than 4 mm long, bicoloured ..... Pelomys

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